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Patent
Attorney's Docket No. P2380-505

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	**Mail Stop Appeal Brief-Patents**
David G. OPSTAD et al	Group Art Unit: 2672
Application No.: 09/306,888	Examiner: T. Havan
Filed: May 7, 1999	Appeal No.: Unassigned
For: AUTOMATIC SYNTHESIS OF FONT TABLES FOR CHARACTER LAYOUT	

SUPPLEMENTAL BRIEF FOR APPELLANTS

Commissioner for Patents
Alexandria, Virginia 22313-1450

Sir:

In response to the Official Action dated October 2, 2003, Appellants respectfully request reinstatement of the appeal. Appellants incorporate by reference herein the Brief for Appellants on June 26, 2003 (hereinafter, "the Brief").

This supplemental appeal is from the October 2, 2003 Office Action in which claims 1-9, 11-13, 16-20, 22-27 and 29-31 were rejected for a fifth time. The appealed claims have never been amended from their original form and were rejected in first through fourth Office Actions respectively dated February 13, 2001, October 23, 2001, August 13, 2002, and January 27, 2003. In response to the fourth Office Action, Appellants submitted in the Brief, appealing the rejection of the claims. Thereafter, the Office reopened prosecution by issuing the non-final Office Action of October 2, 2003 (hereinafter, "the fifth Office Action").

A Government fee of $320.00 was paid when Appellants filed a Brief for Appellant on May 22, 2002. Therefore, no fee is believed due for filing the present Supplemental Brief. However, if any additional amount is required by this paper, the Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§1.16, 1.17, and 1.21, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in triplicate.

SUPPLEMENTAL ARGUMENTS

In the fifth Office Action, several points were newly raised that will now be addressed.

Appellants' Arguments Presented in the Brief Are Not Moot

On page 2 of the fifth Office Action, the Examiner states "Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection." It is respectfully submitted, however, that the arguments contained the Brief are not "moot," as alleged by the Examiner. The rejection in the fifth Office Action was based in the same statute and applied the same references as in the rejection of the fourth, and final Office Action. Appellants therefore request the Examiner to address the numerous points raised in the Brief.

The Newly Asserted Points Do Not Establish a *Prima Facie* Case

With respect to the Section 103 rejection of claims 1, 11, 19 and 26, as allegedly being unpatentable over the Sonnenschein patent in view of the Patel et al. patent, the statements of rejection in the fifth Office Action includes the following additional statements on page 4, lines 7-9:

> In other words, Sonnenschein teaches a data table [sic, that?] pertains to the layout of the glyphs in figures 4-8f. Figures 4-6 and 8a-8f disclose a predetermined data table for the needed glyphs.

As noted in the Brief, the illustrated examples depicted in Figures 4 to 6 do not relate to predetermined data tables, as alleged in the Office Action. Rather, these figures are provided in Sonnenschein to *illustrate* how the text subsystem processes inserted text strings with or without the procedure carried out by the logic of Figure 2. (See column 3, lines 54-57, column 5, lines 12-14 and column 6, lines 35-57.) The Brief further pointed out, at page 8, that the arrangements of information depicted in Figures 4 to 6 of Sonnenschein merely serve to illustrate a concept, and do not constitute a data table as claimed.

The new statements of the Examiner also cite Figures 8a to 8f of the Sonnenschein patent. It is respectfully submitted that Appellants' arguments concerning Figures 4 to 6 of Sonnenschein also apply to Figures 8a to 8f. Appellants further submit that these illustrated examples of Figures 4 to 6 and 8a to 8f cannot reasonably be considered to constitute a *predetermined data table* of a font because they are provided merely to illustrate how text strings would *appear* as a result of processing performed by a text subsystem. (See column 8, lines 13-15.) Moreover, the resulting text strings illustrated in Figures 4 to 6 and 8a to 8f depend on whatever characters are currently contained in an inserted text string. Hence, there would be no apparent reason to store this illustrated data, which relates to how strings would appear after a text subsystem processes a *particular* code page, within a font file generally available to a system.

Claim 1

It is respectfully submitted that the disclosure in the Sonnenschein patent of applying font styles to inserted text characters would not have taught or suggested the specific combination of features recited in claim 1. For instance, it would not have taught or suggested the claimed steps of *determining whether a font contains a predetermined data table that pertains to the layout of the glyphs* and that *if the font is determined not to contain the data table, the table is automatically synthesized based upon data contained in the font.* In contrast, Sonnenschein describes a process 230 that attempts to find, for each character inserted into a text stream, a valid glyph in the font that is currently indicated by the currently set font (which is determined on the previous found font). (See column 5, lines 39-59 and Figures 2a and 2b.) The block 240 shown in Figure 2a expressly describes how process 230 determines whether a glyph exists: "To check if a character is available in a font *the font's character mapping table* is used." Hence, the Sonnenschein patent appears to assume that the data table needed for mapping is already present in a font file. However, this apparent disclosure in Sonnenschein would not have taught or suggested the claimed features of *determining whether a font contains a predetermined data table that*

pertains to the layout of the glyphs and *if the font is determined not to contain the data table, the table is automatically synthesized based upon data contained in the font.*

In connection with Sonnenschein's disclosure of data tables, the fifth Office Action includes the following new statements:

> [Sonnenschein] discloses creating an ordered font table containing a plurality of glyphs, each glyph corresponding to one character in the ordered font table displayed in the first font style. His system determines if the examined character can be displayed in the first font style by searching the ordered font table to determine if there is an associated glyph for the examined character, and if an associated glyph is found, then associating the first font style with the examined character and associates the font style originally associated with the examined character if the examined character does not have an associated glyph in the ordered font table font.

(See page 4, lines 9-17.) The disclosure of this subject matter is found only in dependent claims 5 and 15 of the Sonnenschein patent. (See column 11, lines 34-50, and column 12, lines 34-49.) When considering the disclosure in column 5, lines 39-59 and Figures 2a together with the subject matter of claims 5 and 15, the Sonnenschein patent appears to suggest that a font's existing character mapping table is used when creating an ordered font table *each* time an attempt is made to find a valid glyph in that font. However, this apparent disclosure would not have taught or suggested the recited steps of claim 1 that concern *determining whether a font contains a predetermined data table that pertains to the layout of glyphs* and *if the font is determined not to contain the data table, automatically synthesizing this table based upon data contained in the font*. By contrast, the whole of the disclosure in Sonnenschein appears to teach that each font file already has a respective character mapping table, and that this table is used to create an ordered font table each time that font style is applied to examined characters in a text string. Hence, no step of determining whether a font contains a predetermined table is necessary in Sonnenschein because each font file is assumed to include the table needed by the text subsystem.

The fifth Office Action goes on to state that "Sonnenschein fails to specifically disclose creating a table" (see page 4, line 18) and newly asserts: "Nevertheless, both Sonnenschein and Patel teach changes in font style features. The glyphs are layout [sic,

laid out?] in tables" (see page 4, lines 18-20). It is to be noted that the Sonnenschein patent does not teach or suggest changing features in a font style, as alleged by the Examiner. To the contrary, the process described in Sonnenschein patent applies existing fonts to a selection of characters when it attemps to map an inserted character to an *existing* valid glyph of a font. It does not teach, nor does it remotely suggest, changing font style features of an existing font. Indeed, if the process of Sonnenschein does not find an existing valid glyph in the last "font found," it looks to *another* available font. (See column 5, line 60 to column 6, line 3.)

Turning now to the Patel et al. patent, it is respectfully submitted that this document does not provide what is missing in Sonnenschein. As described on pages 6 to 7 of the Brief, the Patel et al. patent is directed to adding user-specified typographical features to an existing font file, or creating a new font file having user-specified typographical features. These features are first defined by a user in a front-end editable text file (a "feature file") containing logical statements specifying the various desired typographical features. Thereafter, the feature file is processed in a computer program to alter an existing font file, or to create a new font in a font file. (See column 1, lines 44-64.) However, these processes in Patel et al. are performed *before* an altered or new font file is actually implemented in any process of generating an image of a sequence of characters. Hence, the Patel et al. patent does not teach or suggest the steps of *retrieving glyphs from a font which correspond to characters in a string of characters, determining whether that font contains a predetermined data table that pertains to the layout of glyphs* and *if the font is determined not to contain the data table, automatically synthesizing this table based upon data contained in the font*, as recited in claim 1.

At page 5, lines 2-9 of the fifth Office Action, the Examiner newly asserts statements that concern how tables and subtables are created in the Patel et al. system. However, these statements have little, if any, relevance to the way Sonnenschein *applies* an *existing* font to a selection of characters. That is, font features defined by way of the Patel et al. system are used in a *font production environment*, which would appear to involve a separate process that must occur *before* any implementation of a font. (See column 5, lines

23-25.) Furthermore, there does not appear to be any nexus that can be drawn from the Sonnenschein and Patel et al. patents that would have led one of ordinary skill in the art to connect the font substitution process of Sonnenschein with the font file alteration/creation processes disclosed in Patel et al. Such a combination would appear to have been against Sonnenschein's teaching of "on the fly" font substitution during character insertion, and further would most likely result in frequent undesirable alterations of fonts files. Clearly, one of ordinary skill in the art would not have been led to such an impractical combination.

As pointed out in the Brief, a reasonable combination of Sonnenschein and Patel et al. would perhaps have led to a system that may have included one or more available fonts that were modified or created by a user defining and processing a feature file, and the ability to attempt a mapping of each character being inserted into a text string to a valid glyph of one of these previously altered/created fonts. When comparing the combined teaching of Sonnenschein and Patel et al. with claim 1, it is clear that this combination would not have taught or suggested the claimed steps of *determining whether the font contains a predetermined data table that pertains to the layout of glyphs* and *automatically synthesizing said data table, based upon data contained in the font, if the font is determined not to contain said data table.*

Because the proposed combination does not teach or suggest a combination including these features, no *prima face* case of obviousness has been established. As such, the rejection of claim 1 should be reversed.

Claims 19 and 26

Similar distinctions are brought out in independent claims 19 and 26. For instance, claims 19 and 26 each recite the steps of *receiving a request for a data table that pertains to the implementation of a font, determining whether a data table pertaining to the implementation of a font is present in a file containing the font* and *if the table is not present in the font file, synthesizing the table from data contained in the font*. For reasons similar to those given above for claim 1, it is respectfully submitted that these features are not taught or suggested by the Sonnenschein and the Patel et al. patents.

As pointed out above, the Sonnenschein patent assumes that a font's character mapping table is already present when it attempts to map an inserted character to a valid glyph in the font. Furthermore, this disclosure and the subject matter of claims 5 and 15 appears to suggest that an ordered font table is created using the font's character mapping table. It does not teach or suggest claimed features regarding a *determination of whether a data table is present in a file containing a font*, and *if this table is not present*, synthesizing this table.

The Patel et al. patent, on the other hand, is concerned with *per se* creation or alteration of font files. More specifically, the font file changes/creation described in Patel et al. are performed in a font production environment when a user creates a feature file to write the user-specified features to a font file. These processes of Patel et al., however, do not teach the claimed combination of steps including *receiving a request for a data table that pertains to the implementation of a font* and *determining whether a data table is present in a font file*, as recited in claims 19 and 26. In contrast, the processes of altering or creating a font file described in Patel et al. are performed at a time *before* these altered or created font files can be implemented. There is no mention that a request for a data table is received in the Patel et al. patent. Furthermore, Patel et al., like Sonnenschein, does not teach the claimed conditional step of *synthesizing the table from data contained in the file containing the font if it is determined that the table is not present in the font.*

Nor does any combination of Sonnenschein and Patel et al. teach or suggest the invention as set forth in claims 19 and 26. As mentioned above, the processes described in the Patel et al. patent of creating a feature file, and thereafter processing the feature file to write specified typographical features to a font file, have little, if any relevance to character mapping processes carried out by the Sonnenschein system. Hence, one of ordinary skill in the art would not have been led to the impractical combination expressed on page 5 of the fifth Office Action because it would have resulted in mixing font features among fonts based on a page code that would likely change from one document to another document. In addition, Sonnenschein's "on the fly" font substitution would appear to have taught away from any combination of Patel et al. font file creation/alteration to Sonnenschein's

mapping process, because such combination appears to result in a laborious process of defining fonts each time a character cannot be mapped to a last "found font."

As pointed out above, a reasonable combination of the Sonnenschein and Patel et al. patents would have possibly suggested a system having one application for altering and creating font files, and another application for styling a character with a previously defined font upon text entry. Such combination, however, would entail separate processes of creating/altering font files, and styling characters with possibly one of these previously created/altered font files when inserting characters into a text string. Hence, in addition to the failure of the Sonnenschein and Patel patents to teach or suggest a step of *determining whether that data table is present in a file containing the font*, a combination of these documents would not have taught the specific combination of features that includes *receiving a request for a data table that pertains to the implementation of a font* and if *that* table is not present in the font, *synthesizing that table from data contained in the file containing the font*.

For these reasons, the combination of the Sonnenschein and Patel et al. patents does not teach or suggest each and every claimed feature set forth in each of claims 19 and 26. Accordingly, the rejection of claims 19 and 26 should be reversed because it fails to establish a *prima facie* case of obviousness.

Claim 11

Claim 11 is direct to a system for generating images of characters that similarly recites patentable subject matter that is not taught by the proposed combination of the Sonnenschein and Patel et al. patents. For instance, this claim recites, *inter alia*, that a font table synthesizer is *responsive to the absence of a predetermined table for creating and storing that table on the basis of data contained in the font file*. For at least the above reasons, it is respectfully submitted that the Sonnenschein patent, whether taken alone or in any combination with the Patel et al. patent, fails to teach or suggest these claimed features. To the contrary, the system of Sonnenschein assumes that all font tables needed are already present in the font files being accessed. (See column 5, lines 48-54 and Figure

2A, block 240.) Moreover, while the subject matter of claims 5 and 15 and the disclosure at column 5, lines 48-54 and Figure 2A, block 240 appear to suggest that an ordered font is created from the font's character mapping table, there is no suggestion in the Sonnenschein patent that any table creation is *responsive to the absence of a predetermined table*, as claimed.

The newly cited disclosure of the Patel et al. patent, at page 5, lines 2-9 of the Office Action does not remedy the deficiencies of Sonnenschein noted above. First of all, the newly cited processes of Patel et al. that involve writing out tables and subtables definitions to a font table are not performed at a time when characters are entered into a text string, such as when the Sonnenschein patent attempts a font substitution. Rather, these processes concern ways to write specified typographical features to a font file *within a font production environment*. (See column 1, lines 44-54 and column 5, lines 23-25.) Furthermore, there is no teaching or suggestion in the new statements pertaining to Patel et al. that would have taught or suggested the claimed font table synthesizer for creating and storing that table on the basis of data contained in the font file *responsive to the absence of a predetermined table*.

As discussed above, even if one were to consider a combination of the Sonnenschein and Patel et al. patents, such combination would perhaps have suggested a system including an application which allows a user, at one point of time, to create or alter font files containing user-specified features, and at separate time, an application that works with these files when it attempts to map inserted characters of a text string to valid glyphs. Hence, the proposed combination of the Sonnenschein and Patel et al. patent would not have taught or suggested the claimed combination including "a font subsystem which is responsive to the identification of characters *to access at least one font file to retrieve glyphs associated with the identified characters, and data tables that contain information about glyphs in the font*, and a font table synthesizer which is *responsive to the absence of a predetermined table for creating and storing that table on the basis of data contained in the font file*," as recited in claim 11.

For the above reasons, the newly added statements in the fifth Office Action fail to establish a *prima facie* case of obviousness for claim 11. As such, Appellants maintain that the rejection of this claim should be reversed.

CONCLUSION

For all the foregoing reasons, and for the reasons set forth in the Brief, it is respectfully submitted that the Examiner's rejection of claims 1-9, 11-13, 16-20, 22-27 and 29-31 was erroneous. Reversal of the rejection is respectfully requested.

Respectfully submitted,

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